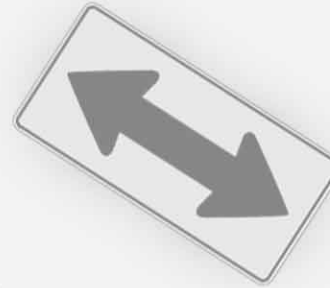


# Virginia's Size, Weight, and Equipment Requirements



## for Trucks, Trailers, and Towed Vehicles

The material in this booklet  
has been condensed from the  
Motor Vehicle Code  
of Virginia



*Virginia Department of Motor Vehicles*

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## INTRODUCTION

The material in this booklet has been condensed from the Motor Vehicle Code of Virginia and explains the size, weight and equipment requirements for trucks, trailers, and towed vehicles. Additional information may be obtained by contacting the appropriate agency listed below.

### **Department of Motor Vehicles (DMV)**

#### **Motor Carrier Credentials**

P. O. Box 27412, Richmond, Virginia 23269  
(866) 878-2582

#### **Motor Carrier Service Centers** (formerly Weigh Stations)

(866) 878-2582  
(804) 367-1746 (Fax)

#### **Virginia Dyed Fuel Program**

(804) 367-2690, 367-1552 or 367-0931  
(800) 272-9268 (hearing impaired only)  
[www.dmvNOW.com](http://www.dmvNOW.com)

#### **Hauling Permits**

P. O. Box 27412  
Richmond, Virginia 23269  
(804) 786-3495  
[www.vahaulingpermits.com](http://www.vahaulingpermits.com)

### **Virginia State Police (VSP)**

P. O. Box 27472  
Richmond, Virginia 23261  
(804) 674-2000

### **Internal Revenue Service (IRS)**

**Excise Tax**  
(804) 916-8300

### **EPA, Office of Transportation and Air Quality**

**Diesel Sulfur Content** (743) 214-4473  
[www.epa.gov/otaq/oms-cont.com](http://www.epa.gov/otaq/oms-cont.com)

### **Emergency Road Conditions**

1-800-367-ROAD (7623)

## Size Limitations

### Interstate and Designated Highways

#### Maximum Length

Truck .....40 feet excluding load  
Semi-trailer..... 48 feet including load  
Semi-trailer.....53 feet\* including load  
Twin Trailers.....28 feet 6 inches each including load  
Combinations..... No overall length restrictions  
Automobile and Watercraft Transporters.....65 feet plus 3 foot  
overhang to front and 4  
foot overhang to rear

Stinger-steered Automobile and  
Watercraft Transporters.....75 feet plus 3 foot overhang to front  
and 4 foot overhang to rear

\*Provided the spacing between the kingpin of the semi-trailer and  
rearmost axle or a point midway between the rear tandem axles does  
not exceed 41feet.

#### Maximum Width

All Vehicles ..... 102 inches excluding mirrors and safety devices  
not to exceed 3 inches on each side of vehicle.

#### Maximum Height

All Vehicles ..... 13 feet, 6 inches

#### Maximum Number of Vehicles in Combination

Tractor trucks may not have more than one semi-trailer and one trailer  
attached.

Trucks may not have more than one trailer attached.

Virginia law specifies that three motor vehicles may be drawn by a saddle  
mount device when operated on an interstate highway in a drive away service  
from factory to dealer and the combination does not exceed 75 feet.

## **Non-Interstate and Non-Designated Highways**

### **Maximum Length**

Truck ..... 40 feet excluding load  
Semi-trailer ..... Not specified  
Twin Trailers ..... Not permitted\*  
Tractor Semi-trailer Combinations ..... 65 feet including load  
Combination of a towing vehicle and  
any manufactured housing ..... 65 feet including load

Vehicles designed and used exclusively for the transportation of motor vehicles may have additional load overhang not to exceed 3 feet on the front of the vehicle and 4 feet on the back of the vehicle. (See below for additional information on extended loads)

\*However, these vehicles may be operated on any highway designated by the Commonwealth Transportation Board (STAA Approved Routes)

### **Maximum Width**

All Vehicles ..... 102 inches excluding mirrors and any  
warning device installed on a school bus.

### **Maximum Height**

All Vehicles ..... 13 feet, 6 inches

### **Maximum Number of Vehicles in Combination**

Tractor trucks may not have more than one semi-trailer attached. Trucks may not have more than one trailer attached. Two motor vehicles may be drawn if coupled together by a saddle mount device.

### **Extended Loads on All Highways**

Loads may not extend more than 3 feet beyond the front of a vehicle or vehicle combination and may not extend more than 6 inches beyond the line of the fender or body on either side of a vehicle or vehicle combination.

Any load extending more than 4 feet beyond the rear of the bed of the body of a vehicle or vehicle combination must be marked in the daytime by a red flag at least 12 inches square, and at night by a red light visible for at least 500 feet.

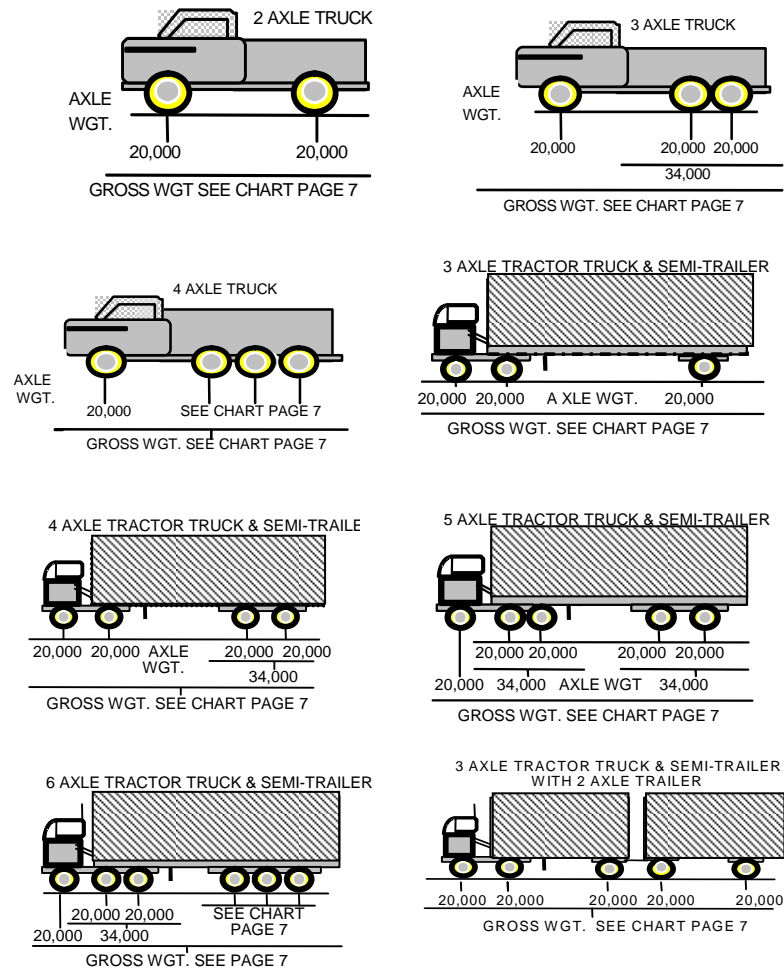
## Weight Limitations

The weights shown below are the maximum allowed except when operating under the authority of an overload permit as outlined on page 12.

Any one axle .....	20,000 pounds
Tandem Axles (more than 40 inches but no more than 96 inches spacing between axle centers)	34,000 pounds
Single Unit (2 Axle) .....	40,000 pounds
Single Unit (3 Axle) .....	54,000 pounds
Single Unit (4 Axle) .....	See chart page 6
Tractor-Semitrailer (3 Axle) .....	60,000 pounds
Tractor-Semitrailer (4 Axle) .....	74,000 pounds
Tractor-Semitrailer (5 Axle) .....	80,000 pounds
Tractor-Semitrailer (6 Axle) .....	80,000 pounds
Tractor-Twin Trailers (5 or more Axles) .....	80,000 pounds
Other Combinations (5 or more Axles) .....	80,000 pounds
Per inch of tire width in contact with road surface ....	650 pounds

The weights listed above are the maximum weight limits allowed. No vehicle can travel on Virginia highways with a single axle weight in excess of 20,000 pounds, tandem axle weight in excess of 34,000 pounds, or a gross weight in excess of 80,000 pounds.

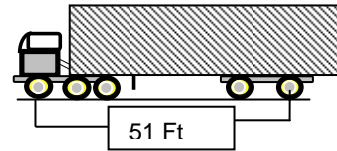
## Maximum Weight Limitations



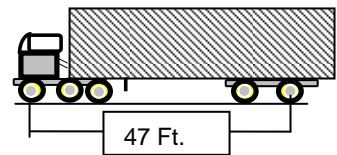
Maximum gross weight is determined by the number of axles and the distance between first and last axles.

### Axle and Gross Weight Limits

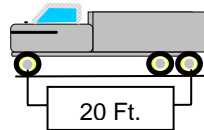
The maximum gross weight is determined by the number of axles on a vehicle and the distance between the first axle (steering) and extreme rear axle. The following examples give the maximum allowable gross weight of each vehicle.



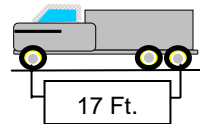
This 5 axle vehicle with 51 feet of axle spacing is allowed a maximum gross weight of 80,000 pounds.



This 5 axle vehicle with 47 feet of axle spacing is allowed a maximum gross weight of 77,500 pounds.



This 3 axle vehicle with 20 feet of axle spacing is allowed a maximum gross weight of 51,000 pounds.



This 3 axle vehicle with 17 feet of axle spacing is allowed a maximum gross weight of 48,500 pounds.

A vehicle may not exceed a single axle weight of 20,000 pounds or a tandem axle weight of 34,000 pounds. Therefore, some vehicles cannot be loaded to the maximum allowable gross weight because the tandem axle or single axle weights would exceed legal weight limits.



## Weight Allowed Based on Axle Spacing

The maximum gross weight is determined by the total number of axles and by measuring the distance between the first axle (steering) and extreme rear axle. The maximum weight allowance for axle groups is determined by measuring the distance between the center of the first axle and the center of the last axle and the number of axles within a specific axle group. Look up the distance between axles and the appropriate number of axles or axle groups on the chart below to obtain the maximum gross or axle group weight allowance.

Distance in Feet Between the Extremes of Any Group of 2 or More Axles		Maximum Weight in Pounds Carried on any Group of Axles				
	<u>2 Axles</u>	<u>3 Axles</u>	<u>4 Axles</u>	<u>5 Axles</u>	<u>6 Axles</u>	<u>7 Axles</u>
4 .....	34,000					
5 .....	34,000					
6 .....	34,000					
7 .....	34,000					
8 .....	34,000	34,000				
9 .....	39,000	42,500				
10 .....	40,000	43,500				
11 .....		44,000				
12 .....		45,000	50,000			
13 .....		46,500	50,500			
14 .....		46,500	51,500			
15 .....		47,000	52,000			
16 .....		48,000	52,500	58,000		
17 .....		48,500	53,500	58,500		
18 .....		49,500	54,000	59,000		
19 .....		50,000	54,500	60,000		
20 .....		51,000	55,500	60,500	66,000	
21 .....		51,500	56,000	61,000	66,500	
22 .....		52,500	56,500	61,500	67,000	
23 .....		53,000	57,500	62,500	68,000	
24 .....		54,000	58,000	63,000	68,500	74,000
25 .....		54,500	58,500	63,500	69,000	74,500
26 .....		55,500	59,500	64,000	69,500	75,000
27 .....		56,000	60,000	65,000	70,000	75,500
28 .....		57,000	60,500	65,500	71,000	76,500
29 .....		57,500	61,500	66,000	71,500	77,000
30 .....		58,500	62,000	66,500	72,000	77,500
31 .....		59,000	62,500	67,500	72,500	78,000
32 .....		60,000	63,500	68,000	73,000	78,500
33 .....			64,000	68,500	74,000	79,500
34 .....			64,500	69,000	74,500	80,000
35 .....			65,500	70,000	75,000	
36 .....			66,000	70,500	75,500	
37 .....			66,500	71,000	76,000	
38 .....			67,500	72,000	77,000	
39 .....			68,000	72,500	77,500	
40 .....			68,500	73,000	78,000	
41 .....			69,500	73,500	78,500	
42 .....			70,000	74,000	79,000	
43 .....			70,500	75,000	80,000	
44 .....			71,500	75,500		
45 .....			72,000	76,000		
46 .....			72,500	76,500		
47 .....			73,500	77,500		
48 .....			74,000	78,000		
49 .....			74,500	78,500		
50 .....			75,500	79,000		

**Note: Any fraction of a foot is rounded to the next highest foot.**

## Overweight Penalties

The owner, operator or person charged with violating weight limits or the weight limits of a hauling permit issued by the Virginia Department of Transportation will be subject to a \$25.00 civil penalty, a \$20.00 processing fee, a \$2.00 weighing fee plus the following liquidated damage assessments.

Violation Type And Overweight Amount (in pounds)	Assessment Per Pound
Axle Weight	
4,000 or less	1¢
4,001 – 8,000	10¢
8,001 – 12,000	20¢
12,001 or more	30¢
Gross Weight	
4,000 or less	1¢
4,001 – 8,000	5¢
8,001 – 12,000	10¢
12,001 or more	15¢
Permit Axle Weight <sup>1</sup>	
4,000 or less	1¢
4,001 – 8,000	10¢
8,001 – 12,000	20¢
12,001 or more	30¢
Permit Gross Weight <sup>1</sup>	
All violations	20¢

<sup>1</sup>*Fines are assessed based on the weight in excess of the permit*

If the gross weight of the vehicle exceeds the weight limit by 25% but no more than 50%, the liquidated damages assessment will double. If the gross weight exceeds 50%, the liquidated damages assessment will triple.

Within 21 days from the citation date, the owner, operator or person charged with a weight violation may make full payment of the assessed fees and penalties to DMV or inform DMV of intent to contest the charge in court as a civil case.

Send payments and written notifications to DMV, 2300 West Broad Street, Room 604, P. O. Box 27412, Richmond, Virginia 23269.

Payments may also be made at DMV MCSCs (Weigh Stations) or any DMV customer service center.

## Commercial Driver's License

The Virginia Commercial Driver's License (CDL) program promotes highway safety by testing drivers on their skills to operate commercial vehicles in a safe manner. The CDL program also prevents drivers from having more than one operator's license and removes problem drivers from the highway.

Operators of vehicles having a manufacturer's gross vehicle weight rating (GVWR) or a gross combination weight rating (GCWR) of 26,001 lbs. or more are required to hold a valid CDL. Operators of vehicles designed to carry 16 or more persons including the driver and operators of vehicles hauling hazardous materials which are required by federal law to be placarded must have a valid CDL.

The following situations exempt the operators of certain vehicles from the CDL requirements.

1. Operation of a vehicle for personal use only, such as a recreational vehicle or truck to move your personal belongings.
2. Operation of a fire truck or other emergency vehicle.
3. Operation of a farm vehicle that meets all of the following conditions:
  - a. Controlled and operated by a farmer.
  - b. Used to transport agricultural products, farm machinery or farm supplies to and from a farm.
  - c. Strictly for farm use and not used in the operation of a common or contract carrier.
  - d. Used within 150 miles of the vehicle owner's farm.
4. Operation of a vehicle for military purposes while the operator is on active duty.

There are three classes of commercial driver's licenses.

Class A - Any combination of vehicles with a GCWR of 26,001 lbs. or more, provided the GVWR of the vehicle being towed is more than 10,000 lbs. Examples: Tractor trailer, tractor with twin trailers, combination bus.

Class B - A single vehicle with a GVWR of 26,001 lbs. or more or any vehicle towing a vehicle with a GVWR of 10,000 lbs. or less. Examples: Dump truck, most buses.

Class C - Any single vehicle weighing less than 26,001 lbs. GVWR or any vehicle towing a vehicle with a GVWR of 10,000 lbs. or less. This class is for vehicles that are placarded for hazardous materials or designed to transport 16 or more persons, including the driver. Examples: Passenger van, pick-up trucks and other small vehicles carrying hazardous materials or passengers.

If you hold a class A license, you can also drive Class B and Class C vehicles as long as you have the proper endorsement(s). If you hold a Class B license, you can also drive Class C vehicles as long as you have the proper endorsement(s).

To obtain a commercial driver's license, request a *Commercial Driver's Manual* from any DMV customer service center or download the manual at [www.dmvNOW.com](http://www.dmvNOW.com). After a thorough and comprehensive study of the manual, visit your local DMV customer service center to take the vision screening, knowledge exam and skills tests. Skills tests are given at full service customer service centers but are not offered at DMV's mall offices. If applying for a CDL, you must either hold a CDL instruction permit for 30 days or complete a commercial driver training school course before the CDL can be issued.

Disqualification cancels the privilege of an individual to drive a commercial vehicle because of one or more offenses such as driving under the influence of alcohol or for traffic violations. Disqualification results in suspension of the CDL for a period ranging from 24 hours to permanent revocation.

## Permits

### Overload

The owner of any motor vehicle may obtain an extension of single axle, tandem axle and gross weight by purchasing an overload permit. The permit extends the single axle weight limit of 20,000 pounds, tandem axle weight limit of 34,000 pounds and gross weight limit based upon axle spacing and the number of axles. Interstate travel is restricted to 80,000 pounds maximum. However, motor carriers may purchase an appropriate overload permit to extend their maximum weight to 84,000 pounds to travel on non-interstate highways.

Permits are valid for one year and may be purchased annually at the time of registration.

<u>Extension Allowed</u>	<u>Permit Fee</u>
1%	\$ 35
2%	\$ 75
3%	\$115
4%	\$160
5%	\$200

The Department of Motor Vehicles makes the permit available to vehicles registered outside Virginia under the same conditions that are applicable to vehicles registered in Virginia.

The owner of any vehicle used for hauling Virginia-grown forest or farm products from the place where they are first produced, cut, harvested, or felled to the location where they are first processed may also receive an additional 5% extension of the single axle, tandem axle, and gross weight limits. Farm vehicles pay half the fee for overload permits.

No permit allows the operation of any vehicle on the Federal Interstate System with a single axle weight in excess of 20,000 pounds, a tandem axle weight in excess of 34,000 pounds or a gross weight greater than that permitted based on axle spacing or a gross weight, regardless of axle spacing, in excess of 80,000 pounds.

Overload permits cannot be used in conjunction with oversize/overweight hauling permits. The only exception to this rule applies to Concrete Mixed-In-Transit carriers. Concrete Mixed-In-Transit carriers can purchase an overload permit up to a maximum of 5% above the authorization allowed by an oversize/overweight hauling permit.

Overload permits may be obtained at any DMV customer service center or from:

Department of Motor Vehicles  
2300 West Broad Street  
Box 27512  
Richmond, Virginia 23209  
(804) 367-0479

### **Oversize/Overweight Hauling Permits**

Oversize/overweight permits are available to motor vehicle owners and operators through the Virginia Department of Motor Vehicles (DMV) and at the web site [www.vahaulingpermits.com](http://www.vahaulingpermits.com).

Oversize/overweight permits are available only when:

- no other form of transportation is available, AND
- the load cannot be reduced to meet legal limits.

Empty, oversized and overweight, rubber-tired, self-propelled haulers used in the construction and coal mining industries are eligible to operate under the authority of an oversize/overweight permit. An oversized/overweight permit may be issued only after VDOT has conducted an engineering analysis to ensure that the desired route can support the vehicle's size and weight. The cost of the engineering analysis may also be charged in addition to the permit fee.

Farm machinery, when temporarily propelled, hauled, transported, or moved on the highway by a farm machinery distributor or dealer, fertilizer distributor, or farmer in the ordinary course of business, does not require an oversize permit. However, commercial carriers must secure appropriate permits prior to traveling on Virginia's highways.

Generally, overload permits cannot be used in conjunction with oversize/overweight permits. The only exception to this rule applies to Concrete Mixed-In-Transit carriers (see pages 12 and 15).

The following examples explain situations that require an oversize/overweight permit:

- ▶ Gross weight of the vehicle, including load, exceeds the weight limits as defined in the chart on page 7 of this booklet.
- ▶ Vehicle width, including load, exceeds 8 feet and 6 inches
- ▶ Vehicle height, including load, exceeds 13 feet and 6 inches
- ▶ Length of a single unit vehicle exceeds 40 feet
- ▶ Length of manufactured housing unit and tow vehicle exceeds 65 feet.
- ▶ Length of tractor trailer combination exceeds 65 feet and will travel on non-designated highways
- ▶ Hauling tree-length logs and the combination of the vehicle and the tree-length logs exceeds 65 feet.
- ▶ Hauling or towing a mobile home

You may contact the DMV Hauling Permit Office at (804) 786-3495 for oversize and overweight permit eligibility requirements and additional information concerning your eligibility for Single Trip and Blanket Permits.

Permit Type	Cost
Single Trip	\$12.00 each
<b>Plus</b>	
Mileage Fee (if applicable)	.10 per mile \$1.00 trip fee for mobile homes
Blanket	\$45.00 ( one year). \$85.00 (two years)
<b>Plus</b>	
Mileage Fee (if applicable)	\$40.00 per year (mobile homes included)
Super-load	\$12.00 each + \$4.00 research fee per structure; interstate structures count as one.
<b>Plus</b>	
Mileage Fee (if applicable)	.10 per mile \$1.00 trip fee for mobile homes

### **Permits Available at No Cost**

The code of Virginia allows the following oversize/overweight permits to be issued at no cost to the customer. Contact DMV at (804) 786-3495 for additional information.

#### **Coal, Gravel, Sand, Crushed Stone, Liquids Produced from Gas or Oil Wells**

Coal hauling permits will be issued free of charge for vehicles with three axles that have a maximum gross weight, when loaded, not exceeding 60,000 pounds gross weight, a single axle weight not to exceed 24,000 pounds, and a tandem axle weight not to exceed 45,000 pounds.

Vehicles with four axles may have a maximum gross weight, when loaded, not to exceed 70,000 pounds, a single axle weight not to exceed 24,000 pounds, and a tri-axle weight of no more than 50,000 pounds.

Vehicles with five axles having at least 35 feet of axle spacing may have a maximum gross weight not to exceed 90,000 pounds, a single axle weight not to exceed 20,000 pounds, and a tandem axle weight not to exceed 40,000 pounds.

Vehicles with six axles may have a maximum gross weight, when loaded, not to exceed 110,000 pounds, a single axle weight not to exceed 24,000 pounds, a tandem axle weight not to exceed 44,000 pounds, and a tri-axle weight of no more than 54,500 pounds.

No load of any vehicle operating under a permit shall rise above the top of the bed of the vehicle exceeding the maximum bed size. The maximum bed size is computed by a formula of the gross weight minus the weight of the truck when empty divided by the average weight of coal. The average weight of coal shall be 52 pounds per cubic foot.

A permit issued to haul coal is not valid beyond the distance of 85 miles from the preparation plant, loading dock or railroad, and does not authorize travel on the federal interstate system.

Hauling gravel, sand, crushed stone, liquids produced from gas or oil wells, or water used for drilling and completion of a gas or oil well does not require a permit. However, the weight limits outlined above for hauling these items are allowed and valid only for a distance of no more than 50 miles from the origin to the destination within counties that impose a tax on coal and gases extracted from the earth. No travel is allowed on the



unusual noise. Exhaust systems must meet the same standards as those set for a factory-installed system designed for the specific vehicle.

#### Concrete Haulers

Permits will be issued free of charge to three- or four-axle vehicles that are used exclusively for the mixing concrete in transit or at a project site, or for transporting necessary components in a compartmentalized vehicle to produce concrete immediately upon arrival at a project site.

Three-axle vehicles shall not exceed 60,000 pounds gross weight, 20,000 pounds on a single axle, and 40,000 pounds on a tandem axle. Four-axle vehicles with at least 22 feet of axle spacing shall not exceed 70,000 pounds gross weight, 20,000 pounds on a single axle, and 50,000 pounds on a tri-axle weight. No single axle within the tri-axle grouping shall exceed 20,000 pounds. The permit does not authorize travel on the federal interstate system.

#### Containerized Cargo

Permits will be issued free of charge for cargo transported in a sealed seagoing container bound to or from a seaport. The seagoing container shall be transported via marine transport and the contents of the seagoing container shall not be changed from the time it is loaded to the time it is delivered.

#### Cotton Module

Permits will be issued free of charge to vehicles used exclusively to transport seed cotton modules between September 1 and December 31. The tandem axle weights shall not exceed 44,000 pounds, the single axle weights shall not exceed 20,000 pounds, and the gross weight shall not exceed 56,000 pounds.

The permit does not authorize travel on the federal interstate system.

#### Excavated Material

Permits will be issued free of charge for three- or four-axle vehicles used exclusively for the purpose of hauling excavated materials from construction-related land-clearing operations.

Three-axle vehicles cannot exceed a gross weight of 60,000 pounds, 20,000 pounds on a single axle, or 40,000 pounds on a tandem axle.

Four-axle vehicles cannot exceed a gross weight of 70,000 pounds, 20,000

pounds on a single axle, or 40,000 pounds on a tandem axle. The permit does not authorize operation of the vehicle hauling excavated material for a distance of more than 25 miles from the land-clearing operation. The permit does not authorize travel on the federal interstate system.

Excavated material is defined as natural earth materials, which includes stumps, brush, leaves, soil, and rocks removed by any mechanized means.

#### Solid Waste

Permits will be issued free of charge to two- and three-axle vehicles used exclusively for hauling solid waste other than hazardous waste. Two-axle vehicles shall not exceed 40,000 pounds gross weight or 20,000 pounds per axle. Three-axle vehicles shall not exceed 60,000 pounds gross weight, 40,000 pounds on the tandem axle, or 20,000 pounds on a single axle.

Three-axle vehicles shall not exceed 60,000 pounds gross weight, 20,000 pounds on a single axle, or 40,000 pounds on a tandem axle.

The permit shall not authorize the operation of any vehicle beyond the boundary of the county or city where it is principally garaged or for a distance of more than 25 miles from the place where it is principally garaged, whichever is greater. The permit does not authorize travel on the federal interstate system.

#### Specialized Equipment

Permits will be issued free of charge to self-propelled mobile vehicles manufactured specifically for the purpose of supporting well-drilling machinery on the job site and whose movement on any highway is incidental to the purpose for which it was designed and manufactured. Vehicles operating under this permit shall not exceed a gross weight of 64,000 pounds, 20,000 pounds on a single axle, or 44,000 pounds on a tandem axle. The permit does not authorize travel on the federal interstate system.

#### Virginia-Grown Farm Products

Permits will be issued free of charge to any three-axle vehicle, four-axle combination, or five-axle combination used exclusively for the purpose of hauling Virginia-grown farm products in Accomack and Northampton counties. Three-axle vehicles shall have no single axle weight exceeding 20,000 pounds, 36,000 pounds on the tandem axle, or 50,000 pounds gross weight. Four-axle vehicles shall not exceed 36,000 pounds on the tandem axle; and five axle vehicles shall not exceed 80,000 pounds gross weight. The permit does not authorize travel on the federal interstate system.

## **Safety and Equipment Requirements**

In accordance with the United States Motor Carrier Safety Act of 1984, Virginia has adopted the Federal Motor Carrier Safety regulations pertaining to commercial vehicles. If you are subject to the provisions of the Federal Motor Carrier Safety Regulations you must abide by the regulations in addition to the requirements outlined in this booklet. These regulations are enforced by the Virginia State Police. All equipment must be type-approved by the Superintendent of the Virginia State Police. For more information call (804) 674-2000.

### **Brakes On Trailers**

Every semi-trailer, trailer or separate vehicle attached by a draw bar, chain or coupling to a towing vehicle must be equipped with brakes controlled or operated by the driver of the towing vehicle when the gross weight including the load exceeds 3,000 pounds.

All trailers manufactured or assembled after January 1, 1964, registered for an actual gross weight exceeding 3,000 pounds and equipped with air, electric or vacuum actuated brakes must be equipped with an emergency breakaway system designed to apply the breaks automatically if the trailer brakes away from the tow vehicle.

These requirements do not apply to vehicles being towed for repairs, repossession or in an emergency. These requirements do not apply to vehicles being moved by a wrecker when two wheels of the towed vehicle are off the ground.

### **Brake Performance**

Trucks, tractor-trucks, buses and all combinations traveling at 20 mph or more must be capable of stopping within 40 feet or less when traveling on a dry, hard, approximately level highway free from loose material.

### **Exhaust System**

All motor vehicles must be equipped with an exhaust system comparable to a factory-installed system designed for that specific vehicle. The exhaust system must be in good working order and in constant operation to prevent excessive or unusual noise, annoying smoke and escape of excessive gas, steam or oil.

The term "exhaust system" includes all parts of the motor vehicle through which exhaust passes after leaving the engine block. Chambered pipes do not meet the requirements for an effective muffling device to prevent excessive or

federal interstate system.

### **Mirror and Horn**

Every motor vehicle must be equipped with a mirror and a horn. The mirror must provide the operator with a highway view of at least 200 feet to the rear of the vehicle. The horn must be capable of emitting sound audible under normal conditions over a distance of at least 200 feet.

### **Windshield**

Every motor vehicle or reconstructed motor vehicle, other than a motorcycle, registered in Virginia and manufactured, assembled or reconstructed after July 1, 1970, must be equipped with a windshield.

### **Windshield Wipers**

Every permanent windshield on a motor vehicle must be equipped with a device for clearing snow, rain, moisture or other matter from the windshield directly in front of the operator. The device must be constructed so that the vehicle operator controls or operates it. Windshield wiper devices on motor vehicles manufactured or assembled after January 1, 1943 must clean both the right and left sides of the windshield and must be operated mechanically or electrically.

### **Safety Glass**

All for-hire, passenger-carrying motor vehicles registered in Virginia and manufactured or assembled after January 1, 1935, such as taxis, buses and school buses, must be equipped with safety glass wherever glass is used in doors, windows, windshields and sideshields.

All motor vehicles registered in Virginia and manufactured or assembled after January 1, 1936, must be equipped with safety glass wherever glass is used in doors, windows, windshields and sideshields.

### **Draw-bar**

The connection between two vehicles, one of which is towing or drawing the other on a highway, must consist of a fifth wheel, drawbar or a similar device not exceeding 15 feet in length from one vehicle to the other. When a vehicle tows another using a drawbar or similar device, the towing vehicle must be equipped at all times with an emergency chain to prevent the towed vehicle from breaking away if the drawbar fails.

A vehicle may be towed by a chain, rope, or cable not more than 15 feet long in case of a bona fide emergency resulting from a mechanical break-down or accident as long as the vehicle is being towed to the nearest garage or repair shop. A licensed driver must be at the controls of the towed vehicle when the connection consists of chain, rope or cable.

### **Tow Dolly and Converter Gear**

A tow dolly is used to support the front or rear wheels of a passenger vehicle or pick-up or panel truck for towing purposes. A converter gear is an axle-like device, with a fifth wheel mount and used to convert a semi-trailer to a full trailer. These devices are not considered vehicles when used on the public highways. Both devices must be equipped with a safety chain or chains with strength to restrain the device and vehicle being towed should the connection fail. Additionally these devices must be equipped with rear marker lamps or reflectors when towed without a load. When used to tow a vehicle, the towed vehicle must comply with all current and future requirements of the Code of Virginia as relates to towed vehicles.

Although Virginia does not require titling and registration for converter gears and tow dollies, these devices may be titled and registered in Virginia. Converter gears and tow dollies will be registered as trailers and you will receive a license plate to mount on the device. You can also purchase permanent and personalized plates for your converter gear and tow dollies. If you operate in California, you will be required to pay the annual California plate fee.

### **Splash Guards**

Motor vehicles or combinations of vehicles with a gross weight exceeding 40,000 pounds (including the weight of the load) must be equipped with rear fenders, flaps or guards large enough to prevent projection of rocks, dirt, water and other substances from the rear of the vehicle. Tractor trucks and other vehicles used exclusively for hauling logs are exempt from this requirement.

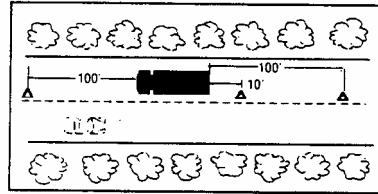
### **Solid Tires**

Vehicles equipped with solid tires must have a permit from the Virginia Department of Transportation to be operated in Virginia.

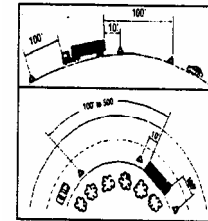
## Flares and Disabled Vehicles

Buses, trucks, tractor trailers or mobile homes stopped on a road or the shoulder of any road, must immediately activate the vehicles hazard warning signals and must put out 3 emergency warning devices within 10 minutes. Flares, torches or reflectorized red triangles may be used as warning devices. If the vehicle is used for transporting flammable liquids in bulk, whether loaded or empty, or flammable gases, red flares or red electric lanterns may be used. Place the warning devices in the following locations.

**On two-lane roads carrying traffic in both directions or on an undivided highway,**  
Place warning devices within ten feet of the front or rear corners of your vehicle.  
Place a warning device 100 feet behind or ahead of your vehicle. Place it on the shoulder or in the lane where you stopped.

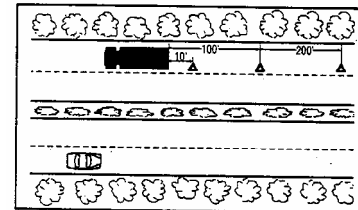


Place a warning device before any hill, curve or anything anything else that prevents other drivers from seeing your vehicle within 500 feet.



**On a one-way or divided highway,**  
Place warning devices 10 feet, 100 feet and 200 feet behind your vehicle.

**When you place the warning devices, hold them between yourself and the oncoming traffic. This helps ensure your safety.**



## Slow Moving Vehicle Emblem

Farm tractors and all self-propelled farm equipment as well as other vehicles designed for operation at 25 mph or less must display a triangular slow-moving vehicle emblem on the rear of the vehicle when traveling on a public highway during day or night.

A slow moving vehicle towing a unit on a public highway must display a slow moving vehicle emblem on one or both vehicles. If the towed unit obscures the emblem on the towing vehicle, then the emblem must be displayed on the towed unit.

### **Fire Extinguisher**

All trucks, buses and power units of tractor trailer combinations must be equipped with an accessible and properly filled fire extinguisher which is securely mounted, freezeproof and allows visual inspection of charge status. The fire extinguisher may not use a vaporizing liquid that emits vapors more toxic than the Underwriter's Laboratories (UL) rating of 5 or 6.

Vehicles constructed before January 1, 1973 must be equipped with a fire extinguisher having a UL rating of 4 BC or higher. Vehicles constructed on or after January 1, 1973 must be equipped with either a fire extinguisher having UL rating of 5 BC or more or two fire extinguishers having a UL rating of 4 BC or more.

Any power unit constructed before January 1, 1971 used for transporting hazardous materials must be equipped with a fire extinguisher having a UL rating of 4 BC or more. Power units constructed on or after January 1, 1971 must be equipped with a fire extinguisher having an UL rating of 10 BC or more.

### **Amber Flashing Lights - Overdimensional Loads**

High intensity amber flashing lights, visible for at least 500 feet, must be used on any vehicle operating under the authority of a highway hauling permit when either the vehicle or the load is more than 12 feet wide or more than 75 feet long. Such lights must be mounted on the top of the towing vehicle and on the upper rear end of the overdimensional load or vehicle.

However, an overdimensional vehicle does not need amber lights if it is accompanied by escort vehicles with amber flashing lights mounted on the top of each escort vehicle.

### **Headlights**

All motor vehicles must be equipped with at least two head lamps but not more than four lamps that provide illumination ahead of the vehicle. No more than four lamps providing general illumination may be lit, including at least two head lamps and any combination of fog, passing, driving or other auxiliary lights.

## **Rear Lamps**

Every truck, bus, tractor-truck, trailer, or semi-trailer must be equipped with a rear lamp capable of projecting a red light visible in clear weather from a distance of 500 feet from the vehicle's rear end. This lamp or another lamp must also illuminate the license plate with a white light and make it visible from a distance of 50 feet to the rear of the vehicle.

## **Dimension or Marker Lights**

Every motor vehicle, trailer or semi-trailer exceeding 7 feet in width or any part of which extends 4 inches or more beyond the extreme edge of the front fenders must be equipped with lamps mounted at the top front corners. Each lamp must project an amber light visible from the front of the vehicle for at least 500 feet in clear weather. The vehicle must also be equipped with lamps mounted at the top rear corners. Each lamp must project a red light visible from the rear of the vehicle for a distance of 500 feet in clear weather.

Red dimension lights and marker lamps are not necessary on tractor trucks. If the lights and lamps are used, they must be mounted on the highest and widest portions of the permanent body.

Vehicles with three red identification lamps installed on the rear as close as practical to the top and as close as practical to the vehicle's rear vertical centerline and with the lamp centers spaced at least six but not more than 12 inches apart, may mount rear dimension or marker lamps at any height. However, the dimension or marker lights must indicate, as nearly as possible, the full width of the vehicle.

In addition to the dimension and marker lamps, vehicles must be equipped with amber reflectors located on the side and at or near the front. Red reflectors must be used on the rear of the vehicle. Reflectors must be securely fastened to the vehicle at least 24 but not more than 60 inches from the ground. Reflectors must be securely fastened at the highest point possible on vehicles less than 24 inches high.

## **Auxiliary Lamps**

A vehicle must be equipped with two spotlights that, when shining, can be aimed to strike the road to the right of the center, not more than 100 feet ahead. These spotlights may not be used in conjunction with or as a substitute for required headlamps except in the case of an emergency.



## **Directional Signal**

All motor vehicles registered in Virginia and manufactured or assembled after January 1, 1955 must be equipped with approved signal lights on both the front and rear.

Motor vehicles, trailers and semi-trailers, when temporarily stopped on the traveled or paved portion of the highway so as to create a traffic hazard, must use all four turn signals simultaneously to signal approaching motorists of the existing hazard. All four signals may be flashed simultaneously on a vehicle slowed or stopped at the scene of a traffic hazard or when traveling at a speed of 30 miles per hour or less. However all four signals may not be flashed simultaneously while the vehicle is in motion for any other reason.

Effective January 1, 1955, all motor vehicles registered in Virginia and manufactured or assembled after this date must be equipped with approved-type signal lights both to the front and the rear.

A tractor-truck equipped with double-faced signal lamps mounted on the front fenders or the sides of the vehicle near the front does not need to be equipped with mechanical or electrical signal devices on the rear.

## **Stop Signal (Lights)**

Every motor vehicle, trailer or semi-trailer, except an antique vehicle not originally equipped with a stop lamp, registered in Virginia must be equipped with at least one stop lamp. The device must automatically exhibit a red or amber light plainly visible in clear weather from a distance of 500 feet to the rear of the vehicle when the foot brake is applied.

## **Inspection and Traffic Rules**

### **Inspection**

All Virginia registered motor vehicles, trailers and semi-trailers equipped with brakes must be inspected by a certified mechanic at an official Virginia inspection station. The maximum fee \$50. Trailers or semi-trailers require a separate inspection and the fee is \$10.

## **Traffic Rules**

### Speed Limits

Vehicle Type	Interstate Highways	Limited Access Highways	Non-limited Access Highways		School, Business or Residential Zones
			Four or More Lanes	Less Than Four Lanes	
<b>Trucks</b>	65 mph on designated rural; 55 mph on all others	55 mph	55 mph	45 mph	25 mph
<b>Passenger Buses</b>	65 mph on designated rural;	55 mph	55 mph	55 mph	25 mph
<b>School Buses</b>	55 mph	35 mph <sup>(1)</sup>	35 mph <sup>(1)</sup>	35 mph <sup>(1)</sup>	25 mph

<sup>(1)</sup>A school bus may travel 45 mph when not loading or unloading passengers between its starting point and its destination. However, during the loading and unloading of students—from the first pick-up/drop-off to the last pick-up/drop-off—the maximum speed is 35 mph. A school bus may travel 55 mph on an interstate either loaded or unloaded.

### Securing of Load or Contents

The loads of all trucks, trailers and semi-trailers carrying gravel, coal, sand or other nonagricultural and non-forestry products on any highway must either be secured to the vehicle or covered. Public service company vehicles, pickup trucks, emergency snow removal equipment engaged in snow removal operations are excluded from this requirement.

Truck covers used to prevent the escape of solid waste transported in commercial vehicles must be designed, installed, and constructed to keep all of the cargo within the vehicle regardless of the vehicle's speed or weather conditions. This provision, however, does not apply to vehicles used exclusively for agricultural purposes.

Vehicles designed or used for hauling logs, poles or lumber, barrels, hogsheads or other materials or containers which by their nature may shift or roll, may not be operated or moved over any highway unless the load is securely fastened by adequate log chains, metal cables, nylon webbing, steel straps or other restraining devices that prevent shifting or falling of the load. However, in lieu of chains or metal cables, tobacco hogsheads may be secured by manila or hemp rope strong enough and at least five-eighths inch in diameter, to securely fasten the hogshead against shifting, falling or rolling.

#### Weight Inspection Requirement

Operators of trucks which are defined in part as having a registered gross weight in excess of 7,500 lbs. are required by law to drive their vehicles onto scales for weight inspection as directed by either a police officer or by a regulatory highway sign. A police officer may require the operator of a truck to drive a distance up to 10 road miles to a motor carrier service center (weigh station) for weight inspection. Refusal to drive onto the scales for inspection is a misdemeanor.

#### Overweight Citations

Any truck found operating over the legal axle or gross weight is issued a citation.

However, any truck driver operating on non-interstate roads, hauling Virginia-grown forest or farm products (cut, harvested, felled, or dropped from the location where the product was first produced to the location where the product will be first processed) have been granted an exception while traveling on non-interstate highways. The driver will be granted one-hour to shift cargo for any axle weight violation. If the driver successfully shifts the load to meet the legal axle weight requirements, no citation will be issued.

#### Tow Trucks Not Engaged in Towing Another Vehicle

Trucks designed and equipped for towing inoperative or disabled vehicles do not need to be weighed at motor carrier service centers (weigh stations) if the truck is not engaged in towing another vehicle.

## **Hazardous Materials**

### **Hauling Certain Cargoes in Violation of Posted Signs**

Hauling any explosive, flammable or other hazardous cargo as prohibited by the Virginia Department of Transportation through any tunnel on Virginia's highways in violation of any lawfully posted sign constitutes a Class 1 misdemeanor.

### **Hazardous Materials Contact Information**

The transportation of hazardous materials (HAZMAT) within or through Virginia must comply with Federal regulations promulgated by the Secretary of Transportation and set forth in Title 49 of the code of Federal Regulations. Specific HAZMAT related questions must be addressed to the following agencies.

Department of Environmental Quality - Waste Division 629 East Main Street P.O. Box 10009 Richmond, Virginia 23240 HAZMAT (804) 698-4247 Haz. Waste (804) 698-4189	Transport of HAZMAT and transport and permitting of hazardous waste.
Department of Transportation - 1221 East Broad Street Richmond, Virginia 23219 (804) 371-0890	(Transport of HAZMAT through tunnels/bridges only).
CHEMTREC 1-800-424-9300	HAZMAT Spills/Incidents (24-Hours a day)

## Transportation of Hazardous Materials through Bridge-Tunnel Facilities – Rules and Regulations

The Department of Transportation operates Virginia's six bridge-tunnel facilities listed below.

FACILITY NAME	TELEPHONE NUMBER
*Big Walker Mountain I-77	540-228-5571
*East River Mountain I-77	540-928-1994
*Elizabeth River-Downtown I-264	757-494-2400
*Elizabeth River-Midtown I-58	757-683-8123
*Hampton Roads I-64	757-727-4800
*Monitor-Merrimac Memorial Bridge I-664	757-247-8043

\*For information about the operation of these facilities, call The Emergency

Transport of hazardous materials through the Big Walker Mountain and East River Mountain facilities requires compliance with parts 100 through 180 of the Code of Federal Regulations Title 49. No other restrictions apply.

The Chesapeake Bay Bridge Tunnel is not operated by VDOT. Contact the Chesapeake Bay Bridge Tunnel Authority at (757) 331-2960 directly to obtain information regarding their rules and regulations.

Transport of hazardous materials through the Elizabeth River-Downtown, Elizabeth River-Midtown, Hampton Roads and Monitor-Merrimac facilities requires compliance with parts 100 through 180 of the Code of Federal Regulations Title 49 plus compliance with the restrictions listed in the following three tables. These tunnels are classified as urban/water proximate facilities. The following tables list categories of materials grouped under the designations "Prohibited: "No Restrictions" or "Restricted."

### Prohibited

Materials defined in the following classes are not allowed passage through the four urban, water-proximate tunnels.

CATEGORY	PLACARD NAME	REFERENCE
1.1	Explosives 1.1	49 CFR § 172.522
1.2	Explosives 1.2	49 CFR § 172.522
1.3	Explosives 1.3	49 CFR § 172.522
2.3	Poison Gas	49 CFR § 172.540
4.3	Dangerous When Wet	49 CFR § 172.548
6.1 (PG I, inhalation hazard only)	Poison	49 CFR § 172.554

### Restricted

Materials in the following hazard classes are allowed access to the four urban, water-proximate tunnels if transported in a container allowing a maximum capacity of 119 gallons/450 liters or less as a receptacle for liquids, a water capacity of 1000 pounds/454 kilograms or less as a receptacle for gases, and a maximum net mass of 882 pounds/400 kilograms or less and a maximum capacity of 119 gallons/450 liters or less as a receptacle for solids.

CATEGORY	PLACARD NAME	PLACARD REFERENCE
2.1	Flammable Gas	49 CFR § 172.532
3	Flammable	49 CFR § 172.542
5.1	Oxidizer	49 CFR § 172.550
5.2	Organic Peroxide	49 CFR § 172.552
8	Corrosive	49 CFR § 172.558

### No Restrictions

Materials in the following hazard classes are not restricted in the four urban, water-proximate tunnels.

CATEGORY	PLACARD NAME	PLACARD REFERENCE
1.4	Explosives 1.4	49 CFR § 172.523
1.5	Explosives 1.5	49 CFR § 172.524
1.6	Explosives 1.6	49 CFR § 172.525
2.2	Non-Flammable Gas	49 CFR § 172.528
Combustible liquid	Combustible	49 CFR § 172.544
4.1	Flammable Solid	49 CFR § 172.546
4.2	Spontaneously Combustible	49 CFR § 172.547
6.1 (PG I or II, other than PG I inhalation hazard)	Poison	49 CFR § 172.554
6.1 (PG III)	Keep Away From Food	49 CFR § 172.553
6.2	(None)	
7 Radioactive	Radioactive	49 CFR § 172.556
9	Class 9	49 CFR § 172.560
ORM-D	(None)	

## **Travel Restrictions for Trucks using U. S. Route 17**

Effective July 1, 2001, tractor truck/semi-trailer combinations (i.e., tractor trailers) are prohibited from operating on U.S. Route 17 in Fauquier County, Virginia between U.S. Route 50 and Interstate 66. The only exceptions are trucks making local deliveries, pickups or transactions within 25 miles of the restricted area.

## NOTES

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Visit the Virginia DMV web site at

[www.dmvNow.com](http://www.dmvNow.com)

for commercial driver and motor  
carrier information and services.



- Size Limitations
- Weight Limitations
- Commercial Driver's License
- Permits
- Safety and Equipment Requirements
- Inspection and Traffic Rules
- Hazardous Materials
- Farm Vehicles and Dyed Fuel



# Size, Weight and Equipment Requirements

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